

# Italicen-12-yl isobutyrate

**Inchi:** InChI=1S/C19H30O2/c1-12(2)17(20)21-11-18(5)15-7-6-14(4)19(15)9-8-13(3)10-16(18)19  
**InchiKey:** QSRNPZUAEPFPOS-DZBHQSCQSA-N  
**Formula:** C19H30O2  
**SMILES:** CC1=CC2C(C)(COC(=O)C(C)C)C3CCC(C)C23CC1  
**Mol. weight [g/mol]:** 290.44

## Physical Properties

| Property code | Value   | Unit    | Source         |
|---------------|---------|---------|----------------|
| gf            | 24.72   | kJ/mol  | Joback Method  |
| hf            | -443.38 | kJ/mol  | Joback Method  |
| hfus          | 24.81   | kJ/mol  | Joback Method  |
| hvap          | 64.77   | kJ/mol  | Joback Method  |
| log10ws       | -4.73   |         | Crippen Method |
| logp          | 4.594   |         | Crippen Method |
| mcvol         | 249.130 | ml/mol  | McGowan Method |
| pc            | 1596.17 | kPa     | Joback Method  |
| rinpol        | 1910.00 |         | NIST Webbook   |
| tb            | 734.01  | K       | Joback Method  |
| tc            | 952.22  | K       | Joback Method  |
| tf            | 460.43  | K       | Joback Method  |
| vc            | 0.953   | m3/kmol | Joback Method  |

## Temperature Dependent Properties

| Property code | Value  | Unit    | Temperature [K] | Source        |
|---------------|--------|---------|-----------------|---------------|
| cpg           | 783.83 | J/mol×K | 734.01          | Joback Method |
| cpg           | 806.18 | J/mol×K | 770.38          | Joback Method |
| cpg           | 827.92 | J/mol×K | 806.75          | Joback Method |
| cpg           | 849.32 | J/mol×K | 843.12          | Joback Method |
| cpg           | 870.63 | J/mol×K | 879.48          | Joback Method |
| cpg           | 892.13 | J/mol×K | 915.85          | Joback Method |
| cpg           | 914.08 | J/mol×K | 952.22          | Joback Method |

# Sources

|                        |                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Joback Method:</b>  | <a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>                                     |
| <b>McGowan Method:</b> | <a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                     |
| <b>NIST Webbook:</b>   | <a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R233177&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R233177&amp;Units=SI</a> |
| <b>Crippen Method:</b> | <a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>                                 |
| <b>Crippen Method:</b> | <a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>                         |

## Legend

|                 |                                                 |
|-----------------|-------------------------------------------------|
| <b>cpg:</b>     | Ideal gas heat capacity                         |
| <b>gf:</b>      | Standard Gibbs free energy of formation         |
| <b>hf:</b>      | Enthalpy of formation at standard conditions    |
| <b>hfus:</b>    | Enthalpy of fusion at standard conditions       |
| <b>hvap:</b>    | Enthalpy of vaporization at standard conditions |
| <b>log10ws:</b> | Log10 of Water solubility in mol/l              |
| <b>logp:</b>    | Octanol/Water partition coefficient             |
| <b>mcvol:</b>   | McGowan's characteristic volume                 |
| <b>pc:</b>      | Critical Pressure                               |
| <b>rinpol:</b>  | Non-polar retention indices                     |
| <b>tb:</b>      | Normal Boiling Point Temperature                |
| <b>tc:</b>      | Critical Temperature                            |
| <b>tf:</b>      | Normal melting (fusion) point                   |
| <b>vc:</b>      | Critical Volume                                 |

Latest version available from:

<https://www.chemeo.com/cid/32-130-1/Italicen-12-yl-isobutyrate.pdf>

Generated by Cheméo on 2025-12-05 09:11:06.019934261 +0000 UTC m=+4674063.549974915.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.